



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO | ).                                     | FILING DATE    | FIRST NAMED INVENTOR        | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------|--|----------------|-----------------------------|---------------------|------------------|
| 10/660,670     |  | 09/12/2003     | Josephus A.E.P. van Engelen | 1875.4690000 7574   |                  |
| 26111          | 7590                                   | 11/24/2006     |                             | EXAMINER            |                  |
|                | •                                      | R, GOLDSTEIN & | ZAMAN, FAISAL M             |                     |                  |
|                | W YORK AVENUE, N.W.<br>IGTON, DC 20005 |                |                             | ART UNIT            | PAPER NUMBER     |
|                |  |                |                             | 2111                |                  |
|                |  |                | DATE MAILED: 11/24/2006     |                     |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |   | Application No.  | Applicant(s)  |  |  |  |  |  |
|---|---|--|---|--|--|--|--|--|
|   |   | 10/660,670   | VAN ENGELEN ET AL.  |  |  |  |  |  |
|   | Office Action Summary   | Examiner   | Art Unit  |  |  |  |  |  |
|   |   | Faisal Zaman   | 2111  |  |  |  |  |  |
|   | The MAILING DATE of this communication app  |  |   |  |  |  |  |  |
| Period for Reply  |   |  |   |  |  |  |  |  |
| WHIC - Exter after - If NO - Failur Any r   | DRTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DA sions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be tiruly apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133). |  |  |  |  |  |
| Status  |   |  |   |  |  |  |  |  |
| 1)  | Responsive to communication(s) filed on 31 Oc   | ctober 2006.   |   |  |  |  |  |  |
| 2a)⊠  | This action is <b>FINAL</b> . 2b) ☐ This action is non-final.   |  |   |  |  |  |  |  |
| 3)  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is   |  |   |  |  |  |  |  |
|   | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |  |   |  |  |  |  |  |
| Dispositi   | on of Claims  |  |   |  |  |  |  |  |
| 4)🛛   | Claim(s) 1-16 and 18-24 is/are pending in the a   | application.   |   |  |  |  |  |  |
|   | 4a) Of the above claim(s) is/are withdrawn from consideration.  |  |   |  |  |  |  |  |
| 5)  | 5) Claim(s) is/are allowed.   |  |   |  |  |  |  |  |
| · · · · · · · · · · · · · · · · · · ·   | ⊠ Claim(s) <u>1-16 and 18-24</u> is/are rejected.   |  |   |  |  |  |  |  |
|   | Claim(s) is/are objected to.  |  |   |  |  |  |  |  |
| 8)[_  | Claim(s) are subject to restriction and/or  | r election requirement.  |   |  |  |  |  |  |
| Applicati   | on Papers   |  | •   |  |  |  |  |  |
| 9) 🔲 -  | The specification is objected to by the Examine   | r. •   |   |  |  |  |  |  |
| 10)🛛  | 10)⊠ The drawing(s) filed on <u>12 September 2003</u> is/are: a)⊠ accepted or b)☐ objected to by the Examiner.  |  |   |  |  |  |  |  |
|   | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |  |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).                                  |   |  |   |  |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |  |   |  |  |  |  |  |
| Priority u  | nder 35 U.S.C. § 119  |  |   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:                              |   |  |   |  |  |  |  |  |
|   | 1. Certified copies of the priority documents have been received.   |  |   |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |   |  |   |  |  |  |  |  |
|   | 3. Copies of the certified copies of the priority documents have been received in this National Stage   |  |   |  |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received. |   |  |   |  |  |  |  |  |
|   | ee the attached detailed office action for a list of  | or the certified copies not receive  |   |  |  |  |  |  |
| Attachment  | c(s)  |  |   |  |  |  |  |  |
|   | e of References Cited (PTO-892)   | 4) Interview Summary   |   |  |  |  |  |  |
| 3) Inform   | e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) ' No(s)/Mail Date  | Paper No(s)/Mail D  5)  Notice of Informal F  6) Other:  | ate Patent Application (PTO-152)  |  |  |  |  |  |

Art Unit: 2111

### **DETAILED ACTION**

## Response to Amendment

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (U.S. Patent No. 5,264,958), in view of Applicant's Admitted Prior Art (hereinafter "AAPA").

Regarding Claim 1, Johnson discloses a serial data interface system (Johnson, Figure 1, item 18 and Figure 3, Column 3, lines 57-68) comprising:

A first transceiver (Johnson, Figure 3, item 28 with item 33, Column 4 line 67 – Column 5 line 34) configured to comply with a first standard (Johnson, Column 5, lines 18-22; ie. the V.35 standard) coupled to a set of pins of an interface (Johnson, Figure 3, item 20, Column 4, lines 33-37); and

A second transceiver (Johnson, Figure 3, item 28 with item 35, Column 4 line 67 – Column 5 line 34) configured to comply with a second standard (Johnson, Column 5, lines 18-22; ie. the X.21 standard) coupled to the set of pins, wherein the interface can electronically change between the first and second standard (Johnson, Column 5, lines 18-30; ie. the correct cable is used in electronically switching between the two standards [e.g. V.35 or X.21]).

Art Unit: 2111

Johnson does not expressly disclose wherein said first standard is a data-strobe standard; and

Wherein said second standard is a serializer-deserializer standard.

In the same field of endeavor (e.g. bilingual ports in IEEE1394 ports), AAPA teaches the common use of the IEEE 1394-1995/1394a-2000 (a data-strobe standard, as evidenced by AAPA, Page 1, paragraph 0002) and IEEE 1394b-2002 standards (a Beta and serializer-deserializer standard, as evidenced by AAPA, Page 6, Paragraph 00028) (AAPA, Page 1, Paragraph 0002).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined AAPA's teachings of bilingual ports in IEEE1394 ports with the teachings of Johnson, for the purpose of increasing compatibility among devices that comply with the IEEE 1394-1995/1394a-2000 and IEEE 1394b-2002 standards, which are well known to have much faster data transfer rates than the standards used in Johnson.

Regarding Claim 2, Johnson does not expressly disclose wherein the first standard is IEEE 1394-1995/1394a-2000 standard; and the second standard is IEEE 1394b-2002 standard.

In the same field of endeavor, AAPA teaches the common use of the IEEE 1394-1995/1394a-2000 and IEEE 1394b-2002 standards (AAPA, Page 1, Paragraph 0002).

The motivation that was used in the combination of Claim 1, super, applies equally as well to Claim 2.

Art Unit: 2111

3. Claims 3-16 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of AAPA as applied to Claim 1 above (hereinafter "Johnson-AAPA"), and further in view of Oprescu et al. ("Oprescu") (U.S. Patent No. 5,559,967).

Johnson-AAPA discloses the system of Claim 1 as described above.

Regarding Claim 3, Johnson-AAPA does not expressly disclose wherein the first transceiver device comprises: a twisted-wire pair (TP) bias section; a first TP transceiver section; and a second TP transceiver section.

In the same field of endeavor (e.g. a dynamic, multi-speed bus architecture for enabling multi-speed data transfers on a bus having variable speed and fixed speed nodes connected thereto) Oprescu teaches wherein a first transceiver device (Oprescu, see figure 19, transceiver 14 and column 17 lines 2-12) comprises: a twisted-wire pair (TP) bias section; a first TP transceiver section; and a second TP transceiver section (Oprescu, see figure 19 and column 4 lines 7-11).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Oprescu's teachings of a dynamic, multi-speed bus architecture for enabling multi-speed data transfers on a bus having variable speed and fixed speed nodes connected thereto with the teachings of Johnson, for the purpose of providing a method and apparatus for the transfer of speed messages on a multi-speed bus independent of the data signal transfers (see Oprescu, Column 2, lines 16-19). Johnson-AAPA also provides motivation to combine by stating

it is an object of the invention to provide a more efficient interface subsystem for use with a business machine for use in a communication or data network which is able to interface with one of a plurality of electrical interface standards (see Johnson, Column 2, lines 33-38).

Regarding Claim 4, Oprescu teaches the following limitation, which Johnson-AAPA does not expressly disclose: wherein the TP bias section comprises: a TP bias device; and a connection detection device (Oprescu, see figure 4 and column 3 lines 29-31).

The motivation utilized in the combination of Claim 3, super, applies equally as well to Claim 4.

Regarding Claims 5-8, Oprescu teaches the following limitation, which Johnson-AAPA does not expressly disclose: wherein the first TP transceiver section comprises:

A strobe signal device; a data signal device; an arbitration signal device; and a speed detection device (Oprescu, see figure 3A).

The motivation utilized in the combination of Claim 3, super, applies equally as well to Claims 5-8.

Regarding Claims 9-14, Oprescu teaches the following limitation, which Johnson-AAPA does not expressly disclose: wherein the second transceiver

Art Unit: 2111

comprises: a transmitter section coupled to the second pin; and a receiver section coupled to the first pin (Oprescu, see figures 3A-3B, 4, 13, 19).

The motivation utilized in the combination of Claim 3, super, applies equally as well to Claims 9-14.

Regarding Claim 15, Johnson-AAPA discloses a serial data interface system (Johnson, Figure 1, item 18 and Figure 3, Column 3, lines 57-68), comprising a single port (Johnson, Figure 3, item 20) comprising:

A first section (Johnson, Figure 3, item 28 with item 33, Column 4 line 67 – Column 5 line 34) configured to comply with a first standard wherein the first standard is a data-strobe standard (AAPA, Page 1, paragraph 0002, ie. IEEE 1394-1995/1394a-2000 [a data-strobe standard]); and

A second section (Johnson, Figure 3, item 28 with item 35, Column 4 line 67 – Column 5 line 34) configured to comply with a second standard wherein said second standard is a serializer-deserializer standard (AAPA, Page 1, paragraph 0002; ie. IEEE 1394b-2002 standard, which is a Beta and serializer-deserializer standard, as evidenced by AAPA, Page 6, Paragraph 0028).

Johnson-AAPA does not expressly disclose wherein the first section includes, a TPBIAS device section coupled to first and second pins (through additional circuitry), a first transceiver section coupled to the first and second pins, and a second transceiver section coupled to third and fourth pins, and the second section configured to comply

Art Unit: 2111

with a second standard including, a signal transmitting device coupled to the third and fourth pins, and a signal receiving device coupled to the first and second pins.

In the same field of endeavor, Oprescu teaches a first section (Oprescu, first node 21) configured to comply with a first mode including, a TPBIAS device section coupled to first and second pins (through additional circuitry), a first transceiver section coupled to the first and second pins (Oprescu, see figure 19, transceiver 14, signals 40, 41), and a second transceiver section coupled to third and fourth pins (Oprescu, see figure 19, transceiver 18, signals 42, 43), and a second section (Oprescu, second node 23) configured to comply with a second mode including, a signal transmitting device coupled to the third and fourth pins, and a signal receiving device coupled to the first and second pins (Oprescu, see figure 19, node 23 coupling to signals 41-43).

The motivation utilized in the combination of Claim 3, super, applies equally as well to Claim 15.

**Regarding Claim 16**, Johnson-AAPA teaches wherein the first standard is IEEE 1394-1995/1394a-2000 and the second standard is IEEE 1394b-2002 standard (AAPA, Paragraph 0002).

Regarding Claims 21-24, Oprescu teaches the following limitation, which Johnson-AAPA does not expressly disclose: wherein the first transceiver comprises: a bias section; a first transceiver section; and a second transceiver section (Oprescu, see figures 3A, 9).

The motivation utilized in the combination of Claim 3, super, applies equally as well to Claim 21-24.

Claims 18-20 are directed to a method of the system of Claims 1-14. Johnson, AAPA, and Oprescu teach, either alone or in combination as described above, the system of Claims 1-14. Therefore, Johnson, AAPA, and Oprescu also teach the method of Claims 18-20.

## Response to Arguments

- 4. Applicant's arguments with respect to claims 1-16 and 18-24 have been considered but are moot in view of the new ground(s) of rejection.
- 5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2111

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faisal Zaman whose telephone number is 571-272-6495. The examiner can normally be reached on Monday thru Friday, 8 am - 5:30 pm (every-other-Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

fmz

MARK H. RINEHART
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100